November 7, 2005

John G. Haggard
General Electric Company
Project Coordinator, Hudson River Program
320 Great Oaks Office Park, Ste: 319
Albany, NY 12203

Dear John:

Removal of the targeted 260,000 cubic yards of PCB-contaminated sediment from the Thompson Island Pool of the Upper Hudson during Phase 1 dredging is clearly a necessary and significant step toward cleanup of the Hudson River and environs and the protection of the public health, welfare and the environment. However, several elements of General Electric's draft Phase 1 Intermediate Design Report (IDR), as proposed, could cause injuries to natural resources. These proposed elements include a limit on the volume of backfill, restrictions on nearshore dredging, the potential for significant capping/armoring of the river bottom, and over-reliance on natural recovery.

The Hudson River Trustees stated in their Responsiveness Summary for the Hudson River Natural Resource Damage Assessment Plan (May 2003) that "The Trustees will consider seeking compensation for injuries caused by implementation of the remedy, if any injuries are shown to occur." As you know, under CERCLA "a natural resource trustee . . . may recover damages . . . based on [certain] injuries . . . plus any increase in injuries that are reasonably unavoidable as a result of response actions taken or anticipated . . . ." DOI Regulations, 43 C.F.R. § 11.15(a)(1).

Once remedial construction is complete, it is important that the Hudson Falls to Troy Dam section of the Hudson River be a riverine system capable of supporting diverse aquatic communities. Post-dredging bottom elevations and the distribution of sediments will play key roles in the ability of the River to recover. To our knowledge, the planning process has not included a technical analysis of the amounts and locations of backfill for optimal restoration of habitat diversity. The remedial design effort should include an evaluation of the anticipated geomorphological response of the river to the remediation activities in order to help inform the final design's provisions for habitat restoration. If the limit on backfill as proposed in the IDR results in a less than adequate sediment bedload, the river may become a less productive system over a longer period of time than if a more comprehensive backfill/restoration program is

designed and implemented. Such an outcome would constitute a natural resource injury caused by the need to implement the remedy.

In addition, it appears from our review of the IDR that residual PCBs could remain in nearshore areas, beneath caps to isolate the PCBs which may also be armored to help protect the caps. The result of such capping or armoring would likely be sediment substrates or elevations with limited abilities to support a diversity of aquatic habitats. This would be especially true for beds of submerged aquatic vegetation and fringing wetlands, some of the more biotically rich habitat types in this stretch of the River. Also, capping or armoring of shoreline areas to isolate high concentrations of PCB would serve to leave significant quantities of PCB in the river environment, potentially further increasing the scope of injuries to natural resources in the future. Thus, implementation of the remedy, as currently proposed by the IDR, could increase residual injuries to biota and other natural resources.

It is difficult at this stage of remedy development to estimate the full extent of habitat injuries that would result if GE were to implement the remedy as described in the draft IDR. Each impacted area is unique, and the cost of restoration will depend on the particular characteristics of each. Nonetheless, restoring this type of natural resource injury, such as restoring functional fluvial geomorphology with commensurate aquatic communities, as a separate effort *after* completion of the remedy would dramatically increase the costs to GE. This is because damages will accrue from both injuries to natural resources caused by implementation of the remedy and from interim service losses.

The Trustees believe that many of the natural resource injuries related to implementation of the remedy can be avoided. Careful analysis of backfill needs and strict adherence to engineering performance standards for residual PCB would help ensure that injuries are minimized. Incorporating these issues into the remedial design as planning progresses is the most efficient and least costly way to implement the remedy *and* minimize injuries to natural resources. Clearly, the corresponding benefit to GE from reduction of the exposure it may have to NRD liability will be commensurate with the extent to which injuries to natural resources are avoided. We think there is mutual benefit in discussing these issues and if you wish to do so, please contact Thomas Brosnan at 301-713-3038 ext. 186 or Robert Foley at 413-253-8732.

Sincerely,

Thomas Brosnan
Atlantic Branch Manager
National Oceanic and Atmospheric Administration

Robert Foley
Hudson River Case Manager
Department of the Interior

cc: Doug Garbarini
Paul Simon
Adam Ayers
John Haggard
Mike Elder
Angus Macbeth
Donald W. Fowler